

In the Specification

Based on the new rule 37 CFR § 1.121, please amend the specification by replacement as follows. Marked up versions of the paragraphs are provided at the end of this amendment.

Replace the paragraph on page 2, beginning on line 22 with:

A1 The invention is related to the provision of telecommunication services to the deaf and hearing impaired. More particularly, the invention is related to a call center for handling TTY calls for the deaf and hearing impaired. Still more particularly, this invention is related to providing an identification of a calling party to a called party that is hearing impaired.

Replace the paragraph on page 4, beginning on line 4 with:

A2 It is a problem that there is currently no way of sending a caller identification through the call center to a called party. Currently, when a called party receives a call from a call center providing TRS, the caller identification transmitted to the calling party either includes the identification of the call center or no identification whatsoever. This prevents the called party from knowing the identity of the calling party. Therefore, telephone service for the speech and hearing impaired is not functionally equivalent to that of the hearing users.

Delete the paragraph on page 4, beginning on line 11 and ending on line 15.

Replace the paragraph on page 4, beginning on line 18 with:

A3 The above and other problems are solved and an advance in the art is made by a call center of this invention. An advantage of this invention is that a called party having the proper equipment can determine the identity of the calling party before answering a call. These and other advantages are apparent in the description given below.

Delete the paragraph on page 5, beginning on line 19 and ending on line 20.

Replace the paragraph on page 6, beginning on line 11 with:

A4
FIG. 1 illustrates a call center 100 that provides a called party with an identification of a calling party in accordance with this invention. Call center 100 is connected to a switching system 101. Switching system 101 may be included in the call center or external to call center 100. One example of a switching system 101 connected to a call center 100 is a Rockwell ACD switch. However, switching system 101 may be any device that provides telecommunication services between a calling and a called party. In a preferred exemplary embodiment, switching system 101 provides ISDN service and a protocol such as SS7 to provide telephone service. However, any system that provides for signaling and provides calling party identification may incorporate this invention.

Replace the paragraph on page 6, beginning on line 30 with:

A5
Switching system 101 is connected to a TDD/TYY device 117 or other personal communication device via path 115 and to telephone station 116 via path 114. Paths 114 and 115 may be direct connections to switching system 101 or may be connections via a network, such as the public telephone switching network. Switching system 101 is also connected to a plurality of terminals 120-121 in call center 100. It should be noted that only two terminals are shown. However, any number of terminals that switching system 101 supports may be connected to switching system 101.

Replace the paragraph on page 7, beginning on line 6 with:

A6 Each terminal 120-121 includes a computer system 122-123 and a telephone station 124-125. Computer systems 122-123 may be personal computers made by any of a number of manufacturers. Computer systems 122-123 include modems or other network connection devices that allow connections to switching system 101 via paths 110 and 112. Software executed by computer systems 122-123 allows communication with TDD/ TYY or ASCII devices by transmitting data over a telephone call. Computer systems 122-123 are also connected to a network 130 that allows the computer systems 122-123 to communicate with other devices in call center 100. One skilled in the art will note that only the devices essential to operation of this invention are shown for brevity of this description.

Replace the paragraph on page 8, beginning on line 4 with:

A7 FIG. 2 illustrates a signaling chart showing the messages transmitted between the components of call center 100 to provide the calling party identification of this invention. A call is extended in the following manner. First, a call set-up message for an incoming call from a calling party is received by switching system 101. For purpose of this discussion, the calling party may be communicating via a voice call from telephone set 116 or via a TDD/TYY call from TDD/TYY device 117. The call set-up message 201 may be an IAM message commonly used to establish a telephone connection.

Replace the paragraph on page 8, beginning on line 25 with:

A8 In response to receiving request 205 from a terminal, switching system 101 transmits a request 206 for an identification of the calling party that called terminal 120-121. In a preferred embodiment, the request 206 is transmitted to the call controller 140. However, one skilled in the art will recognize that it may be possible to communicate directly with a computer system 122 in the terminal.

Replace the paragraph on page 9, beginning on line 6 with:

A9
Call controller 140 uses the information including calling party identification in reply 208 to generate a response 209. Response 209 is then transmitted to switching system 101. Switching system 101 then generates a call set-up message 210 that includes the identification of the calling party. The identification of the calling party may be substituted for the identification of the call center or may be added to the message as additional data. The placement of the identification of the calling party is left to those skilled in the art. Call set-up message 210 is then transmitted over the switching network to the called party.

Replace the paragraph on page 9, beginning on line 14 with:

A10
FIG. 3 illustrates the operational steps performed by switching system 101 to provide a calling party identification to a called party. Process 300 begins in step 301 by receiving a call set-up message for an incoming call from a calling party. In response to receiving the call set-up message, switching system 101 transmits a request for an available terminal that can handle the incoming call in step 302. In step 303, switching system 101 receives a response from call controller 140. The response includes an identity of an available terminal 120-121 that will handle the call. The identity may be the telephone number of either the telephone station 124-125 in the terminal or the computer system 122-123.

Replace the paragraph on page 9, beginning on line 29 with:

A11
In step 307, switching system 101 receives a response that includes the calling party identification. This response is from call controller 140 in the preferred embodiment. However, the terminal may transmit the response if the switching system and the terminal communicate directly. Switching system 101 generates a call set-up message that includes the identification of the calling party in step 308. The calling party identification may replace the identification of the call center or may be included along with the identification of the call center. Process 300 ends in step 309 with switching system 101 transmitting the call set-up message.

Replace the paragraph on page 10, beginning on line 15 with:

A12 The calling party identification received in the reply message is then used to generate a response message to transmit to switching system 101 in step 404. Process 400 then ends in step 405 with call controller 140 transmitting the response message to switching system 101.

Replace the paragraph on page 10, beginning on line 19 with:

A13 FIG. 5 illustrates operational steps performed by a terminal to provide a calling party identification to a called party for relayed telephone calls. The same process is used regardless as to whether the incoming call is a voice call or a TDD/TYY call. Process 500 begins in step 501 with a terminal 120-121 connecting an incoming call. In step 502, the terminal receives an identification of a called party for an outgoing call. In most cases, this identification is a telephone number. In step 503, the terminal transmits a call set-up request to the switching system 110 to set up the outgoing call based on the called party identification.

Please indent the paragraph on page 11, beginning on line 11.

In the Drawings

Please cancel FIGS. 6-10. The FIGS. 6-10 are not necessary to satisfy the requirements of 35 U.S.C. § 113. FIGS. 1, and 3-5 are being amended by this amendment. The amended drawings are included in this amendment along with red-ink drawings showing the changes made.

In the Claims

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